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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/751,447 | 01/06/2004 | Tadafumi Shimizu | 2003-1928A | 2593 |

513 7590 11/02/2006

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| EXAMINER | |
|---|---|
| WOLLSCHLAGER, JEFFREY MICHAEL | |
| **ART UNIT** | **PAPER NUMBER** |
| 1732 | |

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/751,447 | SHIMIZU ET AL. | |
| | Examiner | Art Unit | |
| | Jeff Wollschlager | 1732 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *07 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *32-62* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *32-62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Amendment*

Applicant's amendment to the abstract, specification and claims filed August 7, 2006 has been entered. Claims 1-31 are cancelled. Claims 32-62 are new.

### *Specification*

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 32-62 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5-7 of copending Application No. 11/299092 in view of Chen et al. (U.S. Patent 6,113,830).

Claims 5-7 of application 11/299092 claim the basic claimed process of producing a belt comprising a release layer, elastic layer and a support layer but do not specifically teach removing unevenness of the support layer. However, Chen et al. analogously teach that it is known to grind or polish any and all of the layers to provide a smooth coating of uniform thickness (col. 9, lines 12-22).

This is a provisional obviousness-type double patenting rejection.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 38, 44, 51, and 60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 38, 44, 51, and 60 are unclear as to whether the claims are directed to the method of producing a belt or a method of using the belt. For the purposes of examination, the claims are understood to be directed to the position of the supporting layer during the use of the belt.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 32-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (Japanese Patent Application Publication 2002-202675; published July 19, 2002; filed December 28, 2000) in view of Mastro et al. (U.S. Patent Application Publication 2004/0051211) and/or Yoneda et al. (U.S. Patent 5,857,136) or Chen et al. (U.S. Patent 6,113,830) or Nojiri et al. (U.S. Patent Application Publication 2003/0090031) or Ohzuru et al. (U.S. Patent Application Publication 2002/0104606).

Regarding claims 32 and 33, Yoshida et al. teach a method of producing a fixing belt wherein a release layer containing a fluoropolymer is applied to a die surface; baking the release layer; applying an elastic layer over the release layer and baking the elastic layer; applying a supporting layer containing a heat-resistant resin over the elastic layer and baking the supporting layer (Abstract, paragraphs [0019] and [0020]). Yoshida et al. do not teach removing the unevenness of the support layer. However, Yoneda (Figure 4A), Chen et al. (col. 9, lines 12-22), Nojiri et al. (paragraphs [0005, 0008, 0049, 0138]), and Ohzuru et al. (paragraphs [0012-0017, 0133, 0138, 0143-0144, 0179, 0197, 0204, 0291]) each analogously teach or suggest removing the unevenness of the support layer through various means including polishing.

Therefore, it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to modify the method of Yoshida et al. with at least one of the cited references in order to remove the unevenness of the support layer for the purpose as taught by Chen of ensuring a uniform coat is applied (col. 9, lines 12-

22) or for the purpose as taught by Ohzuru et al. of producing layers having a thickness as uniform as possible (paragraph [0144]).

As to claims 34 and 47 Nojiri et al. (paragraph [0005, 0008]) and Mastro et al. (Abstract; paragraph [0076]) teach that forming belts on the inner and outer surface of molds/dies is conventional. One having ordinary skill would have been motivated to employ conventional and art recognized equivalent methods to produce the belt in practicing the method disclosed by Yoshida et al. Turning the belt inside out after production is dictated by the mold/dies employed.

As to claims 35, 41, 48, and 54 Yoshida et al. teach the belt is a fixing belt (Title; Abstract).

As to claims 36, 42, 49, 55, and 57 the cited secondary references teach removing the unevenness of the supporting layer. As such, the amount of material to remove is determined by the degree of unevenness.

As to claims 37, 43, 50, 56, 58 and 59 the cited references are silent as to the resulting surface roughness of the supporting layer. However, the same claimed materials, process steps, and process conditions are employed in the combined references. As such, the same claimed effects and physical properties would be realized (e.g. the resulting surface roughness of the supporting layer would be the same).

As to claims 38, 44, 51, and 60 Yoshida et al. employ the supporting layer on a roller and it is in contact with the roller (paragraphs [0001-0011]).

As to claims 39, 45, 52 and 61 Yoneda et al. illustrate the surface roughness of the roller is higher than the surface roughness of the supporting layer (Figure 4A). Further, regarding the surface roughness of the supporting layer, see the discussion found in the rejection of claim 37 above.

As to claims 40, 46, 53, and 62 the combined references teach baking the support layer and removing the unevenness of the support layer. It is noted that changing the sequence of process steps has been held to be *prima facie* obvious to the ordinarily skilled artisan absent a showing of new or unexpected results.

### *Response to Arguments*

Applicant's arguments, see REMARKS, filed August 7, 2006, with respect to the rejection(s) of claim(s) 1-4 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

### *Conclusion*

All claims are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW

Jeff Wollschlager
Examiner
Art Unit 1732

October 26, 2006

CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER

10/26/06